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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Intellectual Property Dept. Dewitt Ross & Stevens SC 2 East Mifflin Street Suite 600 Madison, WI 53703-2865			EXAMINER  LAUX, JESSICA L.	
			ART UNIT 3635	PAPER NUMBER
			NOTIFICATION DATE 03/18/2011	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket-ip@dewittross.com

# Office Action Summary

**Application No.**

10/701,153

**Applicant(s)**

RUST ET AL.

**Examiner**

JESSICA LAUX

**Art Unit**

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-9, 11-13, 15-25 and 28-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-9, 11-13, 15-25, 28-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is responsive to the amendment filed 12/30/2010.

#### ***Response to Arguments***

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection. As there is a new grounds of rejection for claim 22 necessitated by applicant's remarks this action is Non-Final.

#### ***Claim Objections***

Claims 11,19 are objected to because of the following informalities: the phrase "(PDMS) " is objected to as the use of parenthesis is not permitted except unless they are for reference characters in the claim. As PDMS is not a reference character, the use of parenthesis is objected to. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5,22,28,29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims require that the tape is configured to bridge a gap (where certain claims require a gap of four inches) between building modules without sagging (where some claims require without sagging and other require without sagging more than 0.5 inches), however it is unclear what structure, relationship or features/elements of the tape enable this. It appears that this limitation is a function of the tension applied to tape when installed rather than a function of the tape itself.

Claims 13,17,18,20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention because the claims recite the phrase "at least substantially between 0.04 and 0.06 inches" which is confusing as it is unclear if the claims refer to a thickness over a substantial part of the layer or a thickness over the entire layer that is close to the range.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 5,9,16,29 are rejected under 35 U.S.C. 102(b) as being anticipated by Buis et al (5162150).**

Claim 5. Buis discloses a tape capable for use bridging gaps between building modules of modular building, the tape including:

a tacky adhesive layer (the rubber gum pressure sensitive adhesive as disclosed in Col. 2, lines 1-5) having a lower surface and opposing upper surface; and

a porous reinforcing layer (14) embedded within the adhesive layer between the lower and upper surfaces thereof (as noted in Col. 2, lines 1-5 where the adhesive is pressed into and through the fabric);

wherein the tape is configured to bridge a gap of four inches between building modules without sagging more than 0.5 inches (where the tape of Buis contains all the same structural elements as applicant's claimed invention and therefore is certainly capable of the same claimed bridging without sagging).

Claim 9. The tape of claim 5 wherein the tape is configured to be sufficiently flexible longitudinally to permit its being rolled into a roll of tape (Col. 1, lines 10-14).

Claims 16,29. The tape of claim 5 further including a protective outer layer (12) permanently adhered to the upper surface of the adhesive layer.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buis (5162150).**

Claim 6. The tape of claim 5 wherein the reinforcing layer includes a porous scrim material having a scrim width at least as great as the width of the gap; where the gap is only functionally claimed and Buis discloses having the tape in any desired width for a desired use. Therefore it would have been obvious to one of ordinary skill in the art to provide the scrim material of a sufficient width for the intended use of covering a gap since it has been held that changes in size are viewed as obvious absent any unpredictable results. *In re Rose*, 220 F.2d 459, 105 USPQ 237. One of ordinary skill in the art would have recognized that dimensioning the scrim to be at least as wide as the gap would result in a tape sufficient to cover the gap in a manner that resists damage due to extreme hot conditions (such as over a gap on a roof exposed to the sun).

Claim 7. The tape of claim 6 wherein the scrim material includes interstices penetrated by the adhesive layer (Col. 1, lines 32-33; Col. 2, lines 1-5).

Claim 8. The tape of claim 7 wherein the scrim material is selected from a group consisting of an absorbent or woven cloth, porous fiberglass fabric, wire plastic screen mesh and a perforated plastic or metal strip (Cols. 1-2, where Buis discloses a porous fiberglass fabric).

**Claims 11-12,13,15,17-21,28, 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buis (5162150) in view of Russell et al (7000360).**

Claims 11-12,15. Buis discloses the tape of claim 5 as above, but does not expressly disclose that the adhesive layer includes at least one of the materials selected from a group consisting of EPDM, EPR, TPO< PVC, Neoprene, Butyl Polyisobutylene, Halogenated Butyl, Halogenated Polysobutylene, Isobutylene, reclaimed Butyl, natural rubber and Polydimethylsiloxane (PDMS) and includes a blend of uncured Butyl and semi-cured polymers or cross linked polymers. Buis does disclose a rubber gum pressure sensitive adhesive.

It is notoriously common and well known to make a rubber gum pressure sensitive adhesive from at least some or all of the claimed materials including a blend of uncured Butyl and semi-cured polymers or cross linked polymers. For example, Russell discloses that it is known to make a rubber gum adhesive with butyl rubber, natural rubber or EPDM as well as others (see Col. 1, line 63-Col. 2, line 67; Col. 5, line 6-52) with a blend of uncured Butyl and semi-cured polymers or cross linked polymers. Accordingly it would have been well within the general skill and common sense of one

of ordinary skill in the art to make the pressure sensitive adhesive of Buis of any of the claimed materials as disclosed by Russell as it has been held that the selection of a known material on the basis of its suitability for the intended use is a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claim 13. Buis discloses the tape of claim 5 as above, but does not disclose that the adhesive layer with the reinforcing layer embedded therein has a thickness at least substantially between 0.040 and 0.060.

It is common and known in the art to provide adhesive layers with a thickness at least substantially within the claimed range. For example, Russell discloses an adhesive layer having a thickness in the range of 20-60 mils. Therefore, it would have been obvious and well within the general skill and knowledge of one of ordinary skill in the art to use an adhesive layer within the claimed thickness to provide good adhesion and embedment with the scrim layer, where it has been held that changes in size are viewed as obvious absent any unpredictable results. *In re Rose*, 220 F.2d 459, 105 USPQ 237.

Claim 17. Buis discloses the tape of claim 16 wherein the protective outer layer is non-adhesive, but does not disclose that the thickness is 0.040-0.060 inches.

It is common and known in the art to provide a permanent layer with a thickness at least substantially within the claimed range. For example, Russell discloses a permanent layer attached to an adhesive layer having a thickness generally in the range of 0.25-0.5 inches (Col. 4, lines 29-31). Therefore, it would have been obvious and well within the general skill and knowledge of one of ordinary skill in the art to use a

permanent layer having a thickness from within the claimed thickness to provide strong and durable tape, where it has been held that changes in size are viewed as obvious absent any unpredictable results. *In re Rose*, 220 F.2d 459, 105 USPQ 237.

Claims 18,28. Buis discloses a tape capable of bridging a gap having a gap width between adjacent building modules, the tape including:

- an elastomeric adhesive layer (the rubber gum pressure sensitive adhesive as disclosed in Col. 2, lines 1-5; and having a width and a tacky lower surface and opposing tacky upper surface;

- a porous reinforcing layer (14) embedded entirely within the adhesive layer between the lower surface and the upper surface thereof (Col. 2, lines 1-5); the reinforcing layer having a:

- a multiplicity of interstices (Col. 1, lines 32-33), wherein the adhesive layer extends through the interstices of the reinforcing layer between the lower and upper surfaces thereof (Col. 2, lines 1-5); and
  - being sufficiently flexible to be rolled into a roll of tape (Col. 1, lines 10-14).

Buis does not expressly disclose that the reinforcing layer width has a magnitude at least substantially between the gap width and the adhesive layer width or that the adhesive has a thickness at least substantially between 0.040 and 0.060 inches.

It is noted that the gap is only functionally claimed and Buis discloses having the tape and scrim in any desired width for a desired use. Therefore it would have been obvious to one of ordinary skill in the art to provide the scrim material of a sufficient width, for example between the gap width and the adhesive layer width, for the intended



use of covering a gap since it has been held that changes in size are viewed as obvious absent any unpredictable results. *In re Rose*, 220 F.2d 459, 105 USPQ 237. One of ordinary skill in the art would have recognized that dimensioning the scrim to be wider than the gap, but not wider than the adhesive layer would result in a tape sufficient to cover the gap in a manner that resists damage due to extreme hot conditions (such as over a gap on a roof exposed to the sun), where the scrim reinforcing would then be provided in an overlap with the adjacent modules thus reinforcing the adhesion without providing extraneous un-adhered elements;

additionally, it is common and known in the art to provide adhesive layers with a thickness at least substantially within the claimed range. For example, Russell discloses an adhesive layer having a thickness in the range of 20-60 mils. Therefore, it would have been obvious and well within the general skill and knowledge of one of ordinary skill in the art to use an adhesive layer within the claimed thickness to provide good adhesion and embedment with the scrim layer, where it has been held that changes in size are viewed as obvious absent any unpredictable results. *In re Rose*, 220 F.2d 459, 105 USPQ 237.

Therefore it would have been obvious to provide the tape of Buis with width and thickness of Russell, as noted above, where such a combination provides a tape that anticipates applicant's claimed invention and this sufficiently rigid to bridge a gap of four inches between building modules without sagging more than 0.5 inches as there are no distinguishing structural features between applicant's claimed tape and that of the prior art as above.

Claims 19, 21. Buis in view of Russell disclose the tape of claim 18 as above, wherein the scrim material is selected from a group consisting of an absorbent or woven cloth, porous fiberglass fabric, wire plastic screen mesh and a perforated plastic or metal strip (Cols. 1-2, where Buis discloses a porous fiberglass fabric); but Buis does not expressly disclose that the adhesive layer includes at least one of the materials selected from a group consisting of EPDM, EPR, TPO< PVC, Neoprene, Butyl Polyisobutylene, Halogenated Butyl, Halogenated Polysobutylene, Isobutylene, reclaimed Butyl, natural rubber and Polydimethylsiloxane (PDMS) and includes a blend of uncured Butyl and semi-cured polymers or cross linked polymers. Buis does disclose a rubber gum pressure sensitive adhesive.

It is notoriously common and well known to make a rubber gum pressure sensitive adhesive from at least some or all of the claimed materials including a blend of uncured Butyl and semi-cured polymers or cross linked polymers. For example, Russell discloses that it is known to make a rubber gum adhesive with butyl rubber, natural rubber or EPDM as well as others (see Col. 1, line 63-Col. 2, line 67; Col. 5, line 6-52) with a blend of uncured Butyl and semi-cured polymers or cross linked polymers. Accordingly it would have been well within the general skill and common sense of one of ordinary skill in the art to make the pressure sensitive adhesive of Buis of any of the claimed materials as disclosed by Russell as it has been held that the selection of a known material on the basis of its suitability for the intended use is a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claim 20. Buis in view of Russell discloses the tape of claim 18 including a protective outer layer (12) permanently adhered to and covering the tacky upper surface of the adhesive layer, being non-adhesive but does not disclose that the thickness is 0.040-0.060 inches.

It is common and known in the art to provide a permanent layer with a thickness at least substantially within the claimed range. For example, Russell discloses a permanent layer attached to an adhesive layer having a thickness generally in the range of 0.25-0.5 inches (Col. 4, lines 29-31). Therefore, it would have been obvious and well within the general skill and knowledge of one of ordinary skill in the art to use a permanent layer having a thickness from within the claimed thickness to provide strong and durable tape, where it has been held that changes in size are viewed as obvious absent any unpredictable results. *In re Rose*, 220 F.2d 459, 105 USPQ 237.

Claim 30. Buis discloses the tape as in claim 29 above, but does not expressly disclose that the reinforcing layer width is not greater than the width of the adhesive layer or that the adhesive has a thickness no greater than 0.060 inches.

It is noted that the gap is only functionally claimed and Buis discloses having the tape and scrim in any desired width for a desired use. Therefore it would have been obvious to one of ordinary skill in the art to provide the scrim material of a sufficient width, for example between the gap width and the adhesive layer width, for the intended use of covering a gap since it has been held that changes in size are viewed as obvious absent any unpredictable results. *In re Rose*, 220 F.2d 459, 105 USPQ 237. One of ordinary skill in the art would have recognized that dimensioning the scrim to be wider

than the gap, but not wider than the adhesive layer would result in a tape sufficient to cover the gap in a manner that resists damage due to extreme hot conditions (such as over a gap on a roof exposed to the sun), where the scrim reinforcing would then be provided in an overlap with the adjacent modules thus reinforcing the adhesion without providing extraneous un-adhered elements;

additionally, it is common and known in the art to provide adhesive layers with a thickness at least substantially within the claimed range. For example, Russell discloses an adhesive layer having a thickness in the range of 20-60 mils. Therefore, it would have been obvious and well within the general skill and knowledge of one of ordinary skill in the art to use an adhesive layer within the claimed thickness to provide good adhesion and embedment with the scrim layer, where it has been held that changes in size are viewed as obvious absent any unpredictable results. *In re Rose*, 220 F.2d 459, 105 USPQ 237.

Claim 31. The tape of claim 30, wherein the reinforcing layer includes a series of elongated fibers having a long axis extending transversely within the adhesive layer, the elongated fibers being spaced from each other along the length of the tape(Col. 1, lines 32-47).

**Claims 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venable (4996812) in view of Buis (5162150).**

Claims 22,23. Venable discloses a roof system for a building including adjacent building modules with roof sections having a gap therebetween, the roof system including:

roof membranes (18) covering roof sections and providing coextensive spaced edge strips along the gap (as seen in the figures); and

a tape (26) positioned over the gap, the tape including:

an elastomeric adhesive layer having a tacky upper surface and an oppositely facing tacky lower surface sealably adhered to the spaced edge strips of the roof membranes (Col. 3, line 37-Col. 4, line 9);

protective outer layer (the membrane the adhesive is laminated to;

Col. 3, lines 66-67) adhered to the supper surface of the adhesive layer.

Venable does not expressly disclose a porous reinforcing layer in the adhesive.

It is common and well known in the art to include a porous reinforcing layer embedded within an adhesive layer as claimed. For example, Buis discloses a tape having a protective membrane (12) with an adhesive (the gum rubber pressure sensitive adhesive) having a porous reinforcing layer (14) including a scrim material having interstices therethrough (Col. 1, lines 32-33) embedded within the adhesive layer where the adhesive extends through the interstices (Col. 2, lines 1-5). It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the tape of Venable to have a porous reinforcing layer embedded in the adhesive as disclosed by Buis to provide strong tape that is more resistant to extreme hot conditions (which would be prevalent on a roof exposed to the sun);

where the tape of Venable in view of Buis is configured to bridge gaps between adjacent building modules without substantial sagging between the roof sections, just as applicant's claimed tape as there are no distinguishing structural features that would

enable applicant's claimed tape to be capable of the claimed limitation and the prior art tape incapable.

Claim 24. Venable in view of Buis discloses the roof system of claim 23, but does not expressly disclose that the width of the reinforcing layer is substantially equal to the width of the gap and substantially equal to or smaller than the width of the reinforcing layer. However, it would have been obvious to one of ordinary skill in the art to provide the scrim material of a sufficient width, for example between the gap width and the adhesive layer width, for the intended use of covering the gap since it has been held that changes in size are viewed as obvious absent any unpredictable results. *In re Rose*, 220 F.2d 459, 105 USPQ 237. One of ordinary skill in the art would have recognized that dimensioning the scrim to be wider than the gap, but not wider than the adhesive layer would result in a tape sufficient to cover the gap in a manner that resists damage due to extreme hot conditions (such as over a gap on a roof exposed to the sun), where the scrim reinforcing would then be provided in an overlap with the adjacent modules thus reinforcing the adhesion thereto without providing extraneous un-adhered elements.

Claim 25. Venable in view of Buis discloses a method of using the roof system of claim 23 including the steps of: providing the tape with a release strip temporarily adhered to the tacky surface, positioning the tape over the gape, and adhering it to the adjacent roof membranes (Col. 3, line 65- Col. 4, line 9).

Venable in view of Buis as in claim 23 provides a reinforcing layer embedded in the adhesive layer, but Venable does not expressly disclose that the tape is provided in a roll.

However, it is common and well known in the art to provide tapes in a roll. For example, Buis discloses the tape is provided in a roll (Col. 1, lines 10-14). It would have been obvious to one of ordinary skill in the art to use to provide the tape of claim 23 with the release liner in a roll for ease in installation of large roofing surfaces having long seams, where the tape is unrolled as it is positioned over the seam.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA LAUX whose telephone number is (571)272-8228. The examiner can normally be reached on Monday thru Thursday, 9:00am to 5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jessica Laux/  
Examiner, Art Unit 3635